

Remarks/Arguments:

Claim Rejections – 35 USC 103

The Examiner is alleging that the subject-matter of claims 1 to 50 is obvious from the disclosure of Ryan et al (EP-A-0851373) in view of Yu et al (On-line Control of the Colour Printing Quality by Image Processing, Yu Xiaohan et al, IEEE, TENCON '93, Beijing). We respectfully disagree.

This application includes three independent claims (claims 1, 23 and 39), though it is noted that the Examiner has put forward argument to support his objection only in relation to claim 1, and actually acknowledged that there is no disclosure of the subject-matter of claims 23 and 39 in Ryan et al. For completeness, each of the independent claims will nevertheless be considered in turn.

Claim 1

Claim 1 is directed to an item handling system and requires at least one item preparation station, which provides for the printing of machine-readable symbols on items, and at least one item handling station, which handles items as received from the at least one item preparation station and provides for the reading and processing of information as contained in the symbols as printed on the items. More particularly, the at least one item handling station includes a messaging unit for generating messages, which are representative of the readability of symbols as read thereby, and transmitting the messages to the at least one item preparation station, and the at least one item preparation station includes an indicator for providing an indication of the readability of symbols as printed thereby in response to messages as received from the at least one item handling station.

The Examiner has cited Ryan et al as disclosing the item handling system of the claimed invention, except for the feature regarding the provision of an indication of the readability of machine-readable symbols as printed by an item preparation station, and, to this end, has cited Yu et al as disclosing this feature. This is not the case.

The system of Ryan et al provides an item preparation station, insofar as the system comprises a PC (10), a PSD (12) and a printer (18) which provides for the printing of 2D barcodes on items [column 3, lines 22 to 26], but, contrary to the Examiner's allegation, Ryan et al makes no suggestion whatsoever of an item handling station as required by the claimed invention.

In relation to Ryan et al, the Examiner has referenced columns 1 and 2, but there no disclosure or suggestion of an item handling system, which includes an item handling station, as required by the claimed invention.

Likewise, the system of Yu et al makes no suggestion of an item handling station as required by the claimed invention, and thus even the combination of Ryan et al and Yu et al provides no suggestion of the claimed invention.

Notwithstanding that the cited art makes no suggestion of an item handling station as required by the claimed invention, Ryan et al makes no suggestion of the transmission of messages, which are representative of the readability of symbols, to the item preparation station, and the item preparation station does not include an indicator for providing an indication of the readability of symbols as printed thereby in response to received messages.

Ryan et al does not require such messaging, as the system is concerned only with selecting the module size of the printed 2D barcodes, and makes no recognition whatsoever of monitoring the readability of the printed 2D barcodes during operation.

The system of Ryan et al aims to provide for the improvement of the print quality of 2D barcodes, but this improvement extends only to the selection of the size of the modules of the printed 2D barcodes [column 2, line 38 to column 3, line 6], such that the 2D barcodes are configured to have a required readability.

In the system of Ryan et al, the printer (18) is operated to print a test print which has a predetermined module size [column 3, lines 34 to 37], which is then scanned by a scanner (22, 24) to check for print quality. In one mode of operation, the test print is scanned by a local scanner (22) and the PC (10) makes a recommendation as to the module size of the 2D barcode based on the print quality [column 3, lines 43 to 45]. In another mode of operation, the test print is sent to the vendor, and the vendor scans the test print with a scanner (24) and makes a recommendation as to the module size of the 2D barcode based on the print quality [column 4, lines 27 to 31].

Ryan et al makes no suggestion whatsoever of monitoring the print quality of the 2D barcodes as printed during normal operation, and certainly not in the manner as required by the claimed invention.

To this end, the Examiner has cited Yu et al as teaching the feature of providing an indication of the readability of a printed image.

Firstly, it is submitted that Yu et al relates to an entirely unrelated field of art, namely, that of the inspection of color quality [Figure 1 and INTRODUCTION, first paragraph] in the operation of a printing press, such as in printing newsprint, and, as such, it is inconceivable that a person skilled in the art of printing 2D barcodes, as encompassed by Ryan et al, would have contemplated the teaching of Yu et al, absent an impermissible hindsight analysis of the prior art. This is particularly the case as 2D barcodes are monochromatic.

This notwithstanding, Yu et al is not at all concerned with the reading of machine-readable symbols, in the manner as required by the claimed invention.

The system of Yu et al provides only for the inspection of the color quality of printed pages, and makes no suggestion whatsoever of reading machine-readable symbols or providing an indication as to the readability thereof. The color quality of a printed image does not provide an indication of the machine readability thereof.

Furthermore, Yu et al provides for the on-line control [ABSTRACT] of color quality. As such, if the teaching of Yu et al were to be applied by the skilled person to the teaching of Ryan et al, which we submit it would not, the result would be an item preparation station with on-line quality control, and not the system of the claimed invention, which requires at least one item handling station, which is separate to the item preparation station and machine reads the symbols as printed by the item preparation station and provides the item preparation station with messages representative of symbols as read thereby. This must be the case, as the system of Ryan et al does not include an item handling station.

Accordingly, it is submitted that claim 1 is patentably distinguishes the present invention over the disclosures of Ryan et al and Yu et al when taken alone or in combination.

Claim 23

Claim 23 is directed to an item preparation station, which provides for the printing of machine-readable symbols on items, and more particularly includes an indicator for providing an indication of the readability of symbols as printed thereby in response to messages as received from an item handling station, which handles items as received from the item preparation station.

The Examiner is apparently alleging that Ryan et al discloses the claimed item preparation station, except for the feature regarding the provision of an indication of the readability of machine-readable symbols as printed thereby, and, to this end, is apparently citing Yu et al as disclosing this feature. This is not the case.

As noted above, Ryan et al makes no suggestion of the transmission of messages, which are representative of the readability of symbols, to the item preparation station, and the item preparation station does not include an indicator for providing an indication of the readability of symbols as printed thereby in response to received messages.

Ryan et al does not require such messaging, as the system is concerned only with selecting the module size of the printed 2D barcodes, and makes no recognition whatsoever of monitoring the readability of the printed 2D barcodes during operation.

The system of Ryan et al aims to provide for the improvement of the print quality of 2D barcodes, but this improvement extends only to the selection of the size of the modules of the printed 2D barcodes [column 2, line 38 to column 3, line 6], such that the 2D barcodes are configured to have a required readability.

In the system of Ryan et al, the printer (18) is operated to print a test print which has a predetermined module size [column 3, lines 34 to 37], which is then scanned by a scanner (22, 24) to check for print quality. In one mode of operation, the test print is scanned by a local scanner (22) and the PC (10) makes a recommendation as to the module size of the 2D barcode based on the print quality [column 3, lines 43 to 45]. In another mode of operation, the test print is sent to the vendor, and the vendor scans the test print with a scanner (24) and makes a recommendation as to the module size of the 2D barcode based on the print quality [column 4, lines 27 to 31].

Ryan et al makes no suggestion whatsoever of monitoring the print quality of the 2D barcodes as printed during normal operation, and certainly not in the manner as required by the claimed invention.

To this end, the Examiner has cited Yu et al as teaching the feature of providing an indication of the readability of a printed image.

As noted above, it is submitted that Yu et al relates to an entirely unrelated field of art, namely, that of the inspection of color quality [Figure 1 and INTRODUCTION, first paragraph] in the operation of a printing press, such as in printing newsprint. It is inconceivable that a person skilled in the art of printing 2D barcodes, as encompassed by Ryan et al, would have contemplated the teaching of Yu et al, absent an impermissible hindsight analysis of the prior art. This is particularly the case as 2D barcodes are monochromatic.

Furthermore, Yu et al is not all concerned with the reading of machine-readable symbols, in the manner as required by the claimed invention.

The system of Yu et al provides only for the inspection of the color quality of printed pages, and makes no suggestion whatsoever of reading machine-readable symbols or providing an indication as to the readability thereof. The color quality of a printed image does not provide an indication of the machine readability thereof.

Yet furthermore, Yu et al provides for the on-line control [ABSTRACT] of color quality. As such, if the teaching of Yu et al were to be applied by the skilled person to the teaching of Ryan et al, which we submit it would not, the result would be an item preparation station with on-line quality control, and not the item preparation station of the claimed invention, which is configured to receive messages, representative of symbols as read by a separate item handling station, and provide an indication of the

readability of the symbols in response to the messages. This must be the case, as the system of Ryan et al does not include an item handling station.

Accordingly, it is submitted that the subject-matter of claim 23 is patentably distinguished over the disclosures of Ryan et al and Yu et al when taken alone or in combination.

Claim 39

Claim 39 is directed to an item handling station, which handles items as received from an item preparation station, and more particularly includes a messaging unit for generating messages, which are representative of the readability of symbols as read thereby, and transmitting the messages to the item preparation station.

The Examiner is apparently alleging that Ryan et al discloses the claimed item handling station, except for the feature regarding the provision of an indication of the readability of machine-readable symbols as printed by an item preparation station, and, to this end, is apparently citing Yu et al as disclosing this feature. This is not the case.

As noted above, while the system of Ryan et al provides an item preparation station, insofar as the system comprises a PC (10), a PSD (12) and a printer (18) which provides for the printing of 2D barcodes on items [column 3, lines 22 to 26], Ryan et al makes no suggestion whatsoever of an item handling station as required by the claimed invention.

In relation to Ryan et al, the Examiner has referenced columns 1 and 2, but there no disclosure or suggestion of an item handling station, as required by the claimed invention.

Likewise, the system of Yu et al makes no suggestion of an item handling station as required by the claimed invention, and thus even the combination of Ryan et al and Yu et al provides no suggestion of the claimed invention.

Notwithstanding that the cited art makes no suggestion of an item handling station as required by the claimed invention, Ryan et al makes no suggestion of the transmission of messages, which are representative of the readability of symbols, to an item preparation station.

Ryan et al does not require such messaging, as the system is concerned only with selecting the module size of the printed 2D barcodes, and makes no recognition whatsoever of monitoring the readability of the printed 2D barcodes during operation.

The system of Ryan et al aims to provide for the improvement of the print quality of 2D barcodes, but this improvement extends only to the selection of the size of the modules of the printed 2D barcodes [column 2, line 38 to column 3, line 6], such that the 2D barcodes are configured to have a required readability.

In the system of Ryan et al, the printer (18) is operated to print a test print which has a predetermined module size [column 3, lines 34 to 37], which is then scanned by a scanner (22, 24) to check for print quality. In one mode of operation, the test print is scanned by a local scanner (22) and the PC (10) makes a recommendation as to the module size of the 2D barcode based on the print quality [column 3, lines 43 to 45]. In another mode of operation, the test print is sent to the vendor, and the vendor scans the test print with a scanner (24) and makes a recommendation as to the module size of the 2D barcode based on the print quality [column 4, lines 27 to 31].

Ryan et al makes no suggestion whatsoever of monitoring the print quality of the 2D barcodes as printed during normal operation, and certainly not in the manner as

required by the claimed invention.

To this end, the Examiner has cited Yu et al as teaching the feature of providing an indication of the readability of a printed image.

As again noted above, it is submitted that Yu et al relates to an entirely unrelated field of art, namely, that of the inspection of color quality [Figure 1 and INTRODUCTION, first paragraph] in the operation of a printing press, such as in printing newsprint. It is inconceivable that a person skilled in the art of printing 2D barcodes, as encompassed by Ryan et al, would have contemplated the teaching of Yu et al, absent an impermissible hindsight analysis of the prior art. This is particularly the case as 2D barcodes are monochromatic.

This notwithstanding, Yu et al is not all concerned with the reading of machine-readable symbols, in the manner as required by the claimed invention.

The system of Yu et al provides only for the inspection of the color quality of printed pages, and makes no suggestion whatsoever of reading machine-readable symbols or providing an indication as to the readability thereof. The color quality of a printed image does not provide an indication of the machine readability thereof.

Accordingly, it is submitted that the subject-matter of claim 39 is patentably distinguished over the disclosures of Ryan et al and Yu et al when taken alone or in combination.

The Examiner has also alleged generally that the subject-matter of many of the claims (claims 2, 4 to 24 and 26 to 50) is known from the art of postage metering, but has not identified prior art to support this allegation, other than by a passing reference to column 1, lines 7 to 47 of Ryan et al, which is merely a general disclosure of IBIP

postage indicia. Ryan et al. does not support a rejection of all of claim 2, 4 - 24 and 26 - 50. The Examiner is requested to identify specific documents and passages in relation to the respective claims if the rejection is repeated.

We believe the claims presented in this application distinguish this invention from the prior art and would not have been obvious from it, and that the application is now in proper condition for allowance.

Respectfully submitted,

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